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09/995,383	11/27/2001	Tadashi Nakamura	NEC 01FN051	1807

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EXAMINER

BERCK, KENNETH A

ART UNIT	PAPER NUMBER
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2879

DATE MAILED: 06/18/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/995,383

Applicant(s)

TADASHI NAKAMURA

Examiner

Ken A Berck

Art Unit

2879

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 24 March 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

**DETAILED ACTION**

Amendment A, filed 3/24/2003, has been entered.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 1 are rejected under 35 U.S.C. 103(a) as being unpatentable over Namiki et al. (US 6,157,128).

Namiki discloses (fig 1 and 5) a PDP with a transparent substrate, scanning electrodes and sustaining electrodes formed on the transparent substrate extending in a first direction, an area of a sustain electrode being smaller than an area of the other sustain electrode in each of the display cells, and the widths of the scanning electrode and the sustaining electrode in a second direction crossing the first direction being substantially equal to each other.

Namiki fails to specifically point out the scan electrode having a smaller area than the sustain electrode area in each cell.

Namiki shows that the sustain electrodes (column 4, lines 15-26) and the scanning electrodes are an equivalent structure known in the art, and are interchangeable. Therefore, because these two electrodes were art-recognized equivalents at the time the invention was made, one of ordinary skill in the art would have found it obvious to interchange the scanning and sustain electrodes.

Claims 2-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Namiki et al. (US 6,157,128) in view of Torisaki (US 6,456,006).

Regarding claim 2, Namiki discloses all of the above claim limitations but fails to disclose the scanning electrode comprises a ladder-shape electrode extending in the first direction provided in a center part thereof in the second direction.

Torisaki discloses the scanning electrode comprises a ladder-shape electrode extending in the first direction provided in a center part thereof in the second direction in order to supply power to each cell and reduce electric power consumption.

Hence it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the PDP of Namiki with the scanning electrode comprises a ladder-shape electrode extending in the first direction provided in a center part thereof in the second direction in order to supply power to each cell and reduce electric power consumption, as taught by Torisaki.

Regarding claim 3, Namiki discloses all of the above claim limitations but fails to disclose a portion protruding in the first direction in a center part thereof in the second direction.

Torisaki discloses the scanning electrode comprises a portion protruding in the first direction in a center part thereof in the second direction in order to supply power to each cell and reduce electric power consumption.

Hence it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the PDP of Namiki with a portion protruding in the first

direction in a center part thereof in the second direction in order to supply power to each cell and reduce electric power consumption, as taught by Torisaki.

Regarding claim 4, Namiki discloses all of the above claim limitations but fails to disclose a dimension of the scanning electrode in the first direction increases as it approaches the sustaining electrode.

Torisaki discloses a dimension of the scanning electrode in the first direction increases as it approaches the sustaining electrode in order to supply power to each cell and reduce electric power consumption.

Hence it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the PDP of Namiki with a dimension of the scanning electrode in the first direction increases as it approaches the sustaining electrode in order to supply power to each cell and reduce electric power consumption, as taught by Torisaki.

Regarding claim 5, Namiki discloses all of the above claim limitations and the maximum dimension of the scanning electrode in the first direction is substantially equal to the maximum dimension of the sustaining electrode in the first direction, but fails to disclose the scanning and sustaining electrode being isolated in each of the display cells and commonly connected with a bus electrode.

Torisaki discloses a dimension of the scanning electrode in the first direction increases as it approaches the sustaining electrode in order to supply power to each cell and reduce electric power consumption.

Hence it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the PDP of Namiki with the scanning and sustaining electrode being isolated in each of the display cells and commonly connected with a bus electrode in order to reduce electric power consumption and provide a discharge, as taught by Torisaki.

Regarding claim 6, Namiki discloses all of the above claim limitations and the maximum dimension of the scanning electrode in the first direction is substantially equal to the maximum dimension of the sustaining electrode in the first direction, but fails to disclose the scanning and sustaining electrode being isolated in each of the display cells and commonly connected with a bus electrode.

Torisaki discloses a dimension of the scanning electrode in the first direction increases as it approaches the sustaining electrode in order to supply power to each cell and reduce electric power consumption.

Hence it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the PDP of Namiki with the scanning and sustaining electrode being isolated in each of the display cells and commonly connected with a bus electrode in order to reduce electric power consumption and provide a discharge, as taught by Torisaki.

Regarding claim 7, Namiki discloses all of the above claim limitations and the maximum dimension of the scanning electrode in the first direction is substantially equal to the maximum dimension of the sustaining electrode in the first direction, but fails to

disclose the scanning and sustaining electrode being isolated in each of the display cells and commonly connected with a bus electrode.

Torisaki discloses a dimension of the scanning electrode in the first direction increases as it approaches the sustaining electrode in order to supply power to each cell and reduce electric power consumption.

Hence it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the PDP of Namiki with the scanning and sustaining electrode being isolated in each of the display cells and commonly connected with a bus electrode in order to reduce electric power consumption and provide a discharge, as taught by Torisaki.

Regarding claim 8, Namiki discloses all of the above claim limitations and the maximum dimension of the scanning electrode in the first direction is substantially equal to the maximum dimension of the sustaining electrode in the first direction, but fails to disclose the scanning and sustaining electrode being isolated in each of the display cells and commonly connected with a bus electrode.

Torisaki discloses a dimension of the scanning electrode in the first direction increases as it approaches the sustaining electrode in order to supply power to each cell and reduce electric power consumption.

Hence it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the PDP of Namiki with the scanning and sustaining electrode being isolated in each of the display cells and commonly connected with a bus

electrode in order to reduce electric power consumption and provide a discharge, as taught by Torisaki.

Regarding claim 9, Namiki discloses all of the above claim limitations and the maximum dimensions of the scanning electrode and the sustaining electrode are dimensions of parts that oppose to each other but fails to disclose the scanning and sustaining electrode being isolated in each of the display cells and commonly connected with a bus electrode.

Torisaki discloses a dimension of the scanning electrode in the first direction increases as it approaches the sustaining electrode in order to supply power to each cell and reduce electric power consumption.

Hence it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the PDP of Namiki with the scanning and sustaining electrode being isolated in each of the display cells and commonly connected with a bus electrode in order to reduce electric power consumption and provide a discharge, as taught by Torisaki.

Regarding claim 10, Namiki discloses all of the above claim limitations and the maximum dimensions of the scanning electrode and the sustaining electrode are dimensions of parts that oppose to each other but fails to disclose the scanning and sustaining electrode being isolated in each of the display cells and commonly connected with a bus electrode.



Torisaki discloses a dimension of the scanning electrode in the first direction increases as it approaches the sustaining electrode in order to supply power to each cell and reduce electric power consumption.

Hence it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the PDP of Namiki with the scanning and sustaining electrode being isolated in each of the display cells and commonly connected with a bus electrode in order to reduce electric power consumption and provide a discharge, as taught by Torisaki.

Regarding claim 11, Namiki discloses all of the above claim limitations and the maximum dimensions of the scanning electrode and the sustaining electrode are dimensions of parts that oppose to each other but fails to disclose the scanning and sustaining electrode being isolated in each of the display cells and commonly connected with a bus electrode.

Torisaki discloses a dimension of the scanning electrode in the first direction increases as it approaches the sustaining electrode in order to supply power to each cell and reduce electric power consumption.

Hence it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the PDP of Namiki with the scanning and sustaining electrode being isolated in each of the display cells and commonly connected with a bus electrode in order to reduce electric power consumption and provide a discharge, as taught by Torisaki.

Regarding claim 12, Namiki discloses all of the above claim limitations and the maximum dimensions of the scanning electrode and the sustaining electrode are dimensions of parts that oppose to each other but fails to disclose the scanning and sustaining electrode being isolated in each of the display cells and commonly connected with a bus electrode.

Torisaki discloses a dimension of the scanning electrode in the first direction increases as it approaches the sustaining electrode in order to supply power to each cell and reduce electric power consumption.

Hence it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the PDP of Namiki with the scanning and sustaining electrode being isolated in each of the display cells and commonly connected with a bus electrode in order to reduce electric power consumption and provide a discharge, as taught by Torisaki.

### ***Response to Arguments***

Applicant's arguments with respect to claims 1-12 have been considered but are moot in view of the new ground(s) of rejection.

Art Unit: 2879

### Contact Information


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ken A Berck whose telephone number is (703)305-7984. The examiner can normally be reached on Mon-Fri 8:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel can be reached on (703)305-4794. The fax phone numbers for the organization where this application or proceeding is assigned are (703)308-7382 for regular communications and (703)308-7382 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0956.

kab

June 16, 2003

  
**KENNETH J. RAMSEY**  
**PRIMARY EXAMINER**